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wherein a clearance is formed between the heater and the internal electrode, the clearance being 0.1 mm or more.

Claim 15, line 2, delete "0.3 or" and after "more" insert --than 0.6--.

Claim 21, line 9, change "a predetermined value" to --10 percent--.

31. (Amended) An oxygen concentration detector comprising:

a sensor element including a solid electrolyte and external and internal electrodes provided on external and internal surfaces thereof, respectively;

a heater disposed [inside] at an inner side of said internal electrode to be adjacent to said internal electrode;

a first high-emissivity layer provided on a surface of said heater; and a second high-emissivity layer provided on a surface of said internal electrode, wherein:

said internal electrode has an emissivity less than 0.3;

each of said first high-emissivity layer and said second high-emissivity layer has an emissivity of 0.3 or more, and a porosity more than a predetermined value; and

said first high-emissivity layer is separated from said second high-emissivity layer to form a clearance therebetween, the clearance being 0.1 mm or more.

32. (Amended) An oxygen concentration detector comprising:

a sensor element including a solid electrolyte and external and internal electrodes provided on external and internal surfaces thereof, respectively; and

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a heater disposed adjacent to said internal electrode to form a clearance therebetween, the clearance being 0.1 mm or more;

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wherein said heater [substantially consists of at least one material selected from a group consisting of silicon nitride, aluminum nitride and silicon carbide] has an emissivity of 0.6 or more.

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Amended) An oxygen concentration detector according to claim. 22, wherein said heater consists of [a material having an emissivity of 0.6 or more] at least one material selected from a group consisting of silicon nitride, aluminum nitride and silicon carbide.

Amended) An oxygen concentration detector comprising:

a sensor element including a solid electrolyte and external and internal electrodes provided on external and internal surfaces thereof, respectively; and

a heater disposed adjacent to said internal electrode;

a high-emissivity layer provided on a surface of said internal electrode to form a clearance between said heater and said high-emissivity layer, the clearance being 0.1 mm or more,

wherein said high-emissivity layer has an emissivity higher than that of said external electrode.

wherein said high-emissivity layer has a porosity of more than 10 percent.

REMARKS

Reconsideration and allowance in view of the foregoing amendment and the following remarks are respectfully requested.

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